

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Young-woo LEE et al.

Serial No. 10/673,143

Group Art Unit: 2627

Confirmation No. 3823

Filed: September 30, 2003

Examiner: Peter Vincent AGUSTIN

For: APPARATUS, METHOD, AND MEDIUM INCLUDING COMPUTER READABLE CODE
FOR DISCRIMINATING RECORDING MEDIUM TYPE

REPLY BRIEF UNDER 37 CFR §41.41

Mail Stop: Appeal Brief-Patents

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

In a Notice of Appeal filed December 24, 2009, the Appellant appealed the Examiner's rejections of claims 1-8, 15-18, 27-33, and 39-44, asserted in the Final Office Action mailed July 24, 2009, with the requisite fee set forth in 37 CFR § 41.20(b)(2). An Appeal Brief was timely filed April 26, 2010.

An Examiner's Answer was issued May 13, 2010, thereby setting a due date for the present Reply Brief to be July 13, 2010. Any requisite fees for the present Appeal were previously submitted. However, if any further fees are required in connection with this filing, please charge our Deposit Account No. 19-3935.

I.	STATUS OF CLAIMS	3
II.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL	4
1.	Independent claims 1, 2, 15, and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.	4
2.	Dependent claims 3-4, 17-18, and 29-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.	4
3.	Independent claim 6 and dependent claims 31, 39, and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.	4
4.	Independent claim 7 and dependent claims 32, 40, and 43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.	4
5.	Independent claim 8 and dependent claims 33, 41, and 44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.	4
III.	ARGUMENT	6
1.	Rejection of claims 1, 2, 15, and 27 under 35 U.S.C. §103(a)	9
	Section (a) of Examiner's Answer	10
	Section (c) of Examiner's Answer	13
3-4.	Rejection of claims 6-7, 31-32, 39-40, and 42-43 under 35 U.S.C. §103(a)	14
	Section (f) of Examiner's Answer	14
5.	Rejection of claims 8, 33, 41, and 44 under 35 U.S.C. §103(a)	16
	Section (g) of Examiner's Answer	16
IV.	CONCLUSION	16

I. STATUS OF CLAIMS

Claims 1-18 and 22-44 are pending, with claims 1, 6, 7, 8, 9, 15, 22, 27, and 34 being independent claims. Claims 19-21 have been cancelled.

Only claims 1-8, 15-18, 27-33, and 39-44 are currently under consideration, as claims 9-14, 22-26, and 24-38 have been withdrawn from consideration.

The Examiner's Answer issued May 13, 2010 withdrew the previous rejection of claims 5, 16, and 28.

Accordingly, the outstanding rejection of claims 1-4, 6-8, 15, 17-18, 27, 29-33, and 39-44 is being appealed. The appealed independent claims are claims 1, 6, 7, 8, 15, and 27, and the appealed dependent claims are claims 2-4, 17-18, 29-33, and 39-44.

Claims 1-4, 6-8, 15, 17-18, 27, 29-33, and 39-44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Publication 2002/0075780 by Ogihara et al.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the Final Office Action mailed July 24, 2009, the Examiner rejected claims 1-8, 15-18, 27-33 and 39-44 under 35 USC §103(a) as being unpatentable over Ogihara, U.S. Publication No. 2002/0075780. The rejection of claims 5, 16, and 28 were withdrawn in the Examiner's Answer issued May 13, 2010. Appellant specifically requests review of the following:

1. Independent claims 1, 2, 15, and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.

At issue is whether the Examiner has established a prima facie case of obviousness under 35 U.S.C. §103(a) in the rejection of claims 1, 2, 15, and 27. At further issue is whether it would have been obvious to modify Ogihara as proposed by the Examiner in the rejection of claims 1, 2, 15, and 27.

2. Dependent claims 3-4, 17-18, and 29-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.

At issue is whether the Examiner has established a prima facie case of obviousness under 35 U.S.C. §103(a) in the rejection of claims 3-4, 17-18, and 29-30. At further issue is whether it would have been obvious to modify Ogihara as proposed by the Examiner in the rejection of claims 3-4, 17-18, and 29-30.

3. Independent claim 6 and dependent claims 31, 39, and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.

At issue is whether the Examiner has established a prima facie case of obviousness under 35 U.S.C. §103(a) in the rejection of claims 6, 31, 39, and 42. At further issue is whether it would have been obvious to modify Ogihara as proposed by the Examiner in the rejection of claims 6, 31, 39, and 42.

4. Independent claim 7 and dependent claims 32, 40, and 43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.

At issue is whether the Examiner has established a prima facie case of obviousness under 35 U.S.C. §103(a) in the rejection of claims 7, 32, 40, and 43. At further issue is whether it would have been obvious to modify Ogihara as proposed by the Examiner in the rejection of claims 7, 32, 40, and 43.

5. Independent claim 8 and dependent claims 33, 41, and 44 stand rejected under

35 U.S.C. §103(a) as being unpatentable over Ogihara.

At issue is whether the Examiner has established a prima facie case of obviousness under 35 U.S.C. §103(a) in the rejection of claims 8, 33, 41, and 44. At further issue is whether it would have been obvious to modify Ogihara as proposed by the Examiner in the rejection of claims 8, 33, 41, and 44.

III. ARGUMENT

Independent claims 1, 6-8, 15, and 27 were finally rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara, U.S. Publication No. 2002/0075780. Dependent claims 2-4, 17-18, 29-33, and 39-44 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ogihara.

All arguments are directed to the grounds of rejection and based upon the rejections maintained after the Examiner's Answer issued May 13, 2010. All citations to the "Final Office Action" refer to the Final Office Action mailed July 24, 2009.

Firstly, in applicant's Appeal Brief, regarding pending claims 5, 16, and 28, applicants remarked that:

In addition, based upon the Examiner's proposed modification of Ogihara, the proposed combination would never need or desire the capability to determine whether the recording medium is a DVD(+) type recording medium or a DVD(-) recording medium.

Further, again as noted above, FIGS. 4A-C of Ogihara demonstrate that if a DVD-RW disc were mistakenly inserted into the system proposed by the Examiner, i.e., a system that would only detect for DVD+RW and DVD-ROM disc types, the system would mistakenly believe the inserted disc was a DVD-ROM disc type.

Thus, the Examiner's proposed modification of Ogihara would not be reliable and would incorrectly identify an inserted DVD-RW disc to be a DVD-ROM disc.

With the withdrawal of the rejection of claims 5, 16, and 28 it is respectfully submitted that applicants remarks were persuasive and the Examiner has agreed with the same.

With regard to the remaining rejected claims, the following remarks will primarily address the Examiner's specific remarks with regard to the above noted Grounds of Rejection. Though the Examiner has collectively addressed the rejections of claims 1 and 6-8, for example, beginning on page 3 of the Examiner's Answer, the below remarks will again proceed through applicant's identified Grounds for Rejection. For example, the grounds of rejection for claim 1 will be addressed separately from the grounds of rejection of claim 6.

Again, the following discussion regarding Ogihara it is respectfully submitted.

Firstly, in the Field of Invention portion of Ogihara, paragraph [0002] recites:

The present invention relates to an optical disk drive to which optical disks having different disk formats from each other are mounted, and a method for identifying optical disks. Specifically, the present invention relates to an optical disk drive and the like in which plural frequency components corresponding to the

frequencies of the groove wobbles of plural kinds of recording-capable optical disks are respectively extracted from the signals corresponding to the groove wobbles reproduced from the mounted optical disks, and based on the extracted plural frequency components, it is identified whether or not the mounted disks are recording-capable optical disks, thereby identifying accurately in a short time whether or not the mounted optical disks are recording-capable optical disks.

Still further, paragraphs [0007]-[0010] of Ogihara, in the Summary of Invention section, set forth:

The objective of the present invention is to provide an optical disk drive and the like capable of identifying accurately in a short time whether or not the optical disks mounted thereto is recording-capable optical disk.

An optical disk drive according to the present invention includes: wobble signal reproduction means of reproducing, in the state where each of mounted disks is rotated at a predetermined rotation speed, a signal corresponding to a groove wobble from a predetermined position in a [radial] direction of the optical disk; plural filter means of extracting each of plural frequency components corresponding to the frequencies of the groove wobbles of the plural kinds of recording-capable optical disks; and disk identification means of identifying whether or not each of the mounted optical disk is a recording-capable optical disk, based on the output signals from the plural filter means.

A method for identifying optical disks in the optical disk drive according to the present invention, includes the steps of: reproducing, in the state where each of mounted optical disks is rotated at a predetermined rotation speed, a signal corresponding to a groove wobble from a predetermined position in a [radial] direction of the optical disk; extracting each of plural frequency components corresponding to the frequencies of the groove wobbles of the plural kinds of recording-capable optical disks; and identifying whether or not each of the mounted optical disks is a recording-capable optical disk, based on extracted plural frequency components.

In the above-described manner, the plural frequency components corresponding to the frequencies of the groove wobbles of the plural kinds of recording-capable optical disks are respectively extracted from the signals corresponding to the groove wobbles reproduced from the mounted optical disks, and based on the extracted plural frequency components, it is possible to identify accurately in a short time whether or not the mounted optical disks are recording-capable optical disks.

Thus, the invention of Ogihara is based on extracting plural frequency components and identifying whether the mounted optical disk is a recording-capable optical disk based on the extracted plural frequency components.

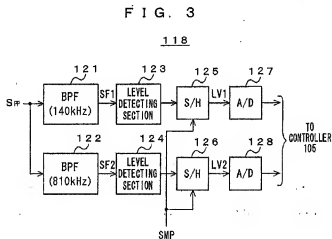
As noted in applicant's Appeal Brief, Ogihara sets forth two primary embodiments for detecting a optical medium type currently being evaluated, a first where detection levels of two band-pass filter samples of a push-pull signal are compared to each other (as shown in FIG. 3 of Ogihara), and a second where wobble frequencies of two samples are compared to each other (as shown in FIG. 5 of Ogihara). The outstanding rejections are based upon a proposed modification of the first embodiment.

In particular, in the first detecting embodiment, Ogihara filters the push-pull signal through a first band pass filter corresponding to the frequency of wobbles for a first type of medium, and also filters the push-pull signal through a second band pass filter corresponding to the frequency of wobbles for a second type of medium. Here, the described wobble frequencies are used for clock synchronization, and would be different for different media types.

Here, the first and second band pass filters generate the extracted plural frequency components. See paragraph [0008] of Ogihara, for example.

Accordingly, by comparing a resultant LV1 output amplitude from the first band pass filter to resultant LV2 output amplitude from the second band pass filter it can be determined which frequency range the input push-pull signal has the greatest energy, i.e., the greater LV output amplitude will identify which of the two frequency ranges of the wobble of the push-pull signal falls within.

Referring to FIG. 3 of Ogihara shown below, two amplitude levels LV1 and LV2, of the respective output signals SF1 and SF2, are required to be extracted from the push-pull signal S_{pp} for disc type detection. The controller thereafter must compare these two amplitude levels.



More particularly, as explained in paragraph [0036] of Ogihara, the controller 105 identifies a disc type by first comparing two detection amplitude levels LV1 and LV2 (generating "a result" of their comparison), and then selectively compares either of the detected amplitude levels with a predetermined level based on the comparison of the two detected amplitude levels.

Thus, in Ogihara, two detected amplitude levels are necessary for any disc type detection. Further, in Ogihara the two detected amplitude levels can thereafter be compared to each other to determine the underlying type of optical medium that is being evaluated. See FIGS. 4A-4C of Ogihara.

Paragraphs [0036], [0040], and [0041] of Ogihara specifically explain:

The controller 105 performs the identification of the mounted optical disk in the following manner by use of the detection levels LV1, LV2. Specifically, in the case where the relationship of LV1>LV2 is established and the LV1 is at a predetermined level or higher, the mounted optical disk 101 is identified as a DVD-RW disk which is a recording-capable disk of a first kind. In the case where the relationship of LV1>LV2 is established and the LV2 is at a predetermined level or higher, the mounted optical disk 101 is identified as a DVD+RW disk which is a recording capable disk of a second kind. Furthermore, in the case where both the LV1 and LV2 are smaller than predetermined levels, the mounted optical disk 101 is identified as a DVD-ROM disk which is reproduction only disk of a third kind. The results of such identifications are displayed on the displaying section 107 through the control by the controller 105, so as to be announced to the user.

As has been described above, in the embodiment of the present invention, the first and second bandpass filters 121,122 in the wobble detecting section 118 extract frequency components of the groove wobbles of the DVD-RW disk and the DVD+RW disk respectively from the push-pull signal S PP. Then, the wobble detecting signal 118 supplies to the controller 105 the detection levels LV1, LV 2 corresponding to the amplitude levels of the respective frequency components. The controller 105 identifies the mounted optical disk 101, based on the detection levels LV1, LV2.

Therefore, in the embodiment of the present invention, identification whether or not the mounted optical disk 101 is a DVD-RW disk, and identification whether or not the mounted optical disk 101 is a 11 DVD+RW disk are simultaneously conducted. In this manner, identification whether or not the mounted optical disk 101 is a recording capable optical disk (i.e., a DVD-RW disk, a DVD+RW disk) can be conducted accurately in a short time. Due to this arrangement, even if duplication inhibited digital video signal is recorded in a recording-capable disk neglecting the duplication inhibition, this state can be acknowledged immediately.

Thus, Ogihara sets forth that the particular use of the two band pass filters and two resultant LV1 and LV2 detection levels, by simply comparing the two detection levels, is an accurate and quick process. Further, as stated in paragraph [0041]: "Due to this arrangement, even if duplication inhibited digital video signal is recorded in a recording-capable disk neglecting the duplication inhibition, this state can be acknowledged immediately."

In response to the Examiner's Answer, the above noted Grounds for Rejection (1), (3), (4), and (5) are addressed below.

1. Rejection of claims 1, 2, 15, and 27 under 35 U.S.C. §103(a)

Appellant submits that the Final Office Action is in error as to the rejection of claims 1, 2, 15, and 27 as being unpatentable under 35 U.S.C. §103(a) over Ogihara (see, for example, Final Office Action at pages 2) for the reasons described below.

Section (a) of Examiner's Answer

Page 7 of the Examiner's Answer sets forth a response to the Appeal Brief's remarks that the one skilled in the art would not modify Ogihara as suggested by the Examiner, as the technique of using the LV1 and LV2 detection levels is essential to Ogihara, i.e., one skilled in the art would not selectively only choose to use the LV2 detection level and corresponding single filter when the essential focus of Ogihara is on using both detection levels and both filters.

As noted in the Appeal Brief, the Final Office Action sets forth a proposed modification of Ogihara to remove the requirement of comparing detection levels LV1 and LV2 to each other, and rather to compare either of the levels to a predetermined reference value.

More generally, the Examiner has indicated that such a modification of Ogihara would permit Ogihara to only need discriminate between the DVD-RW and DVD-ROM discs, or only discriminate between the DVD+RW and DVD-ROM discs, rather than the collective capability of discriminating between the DVD-RW, DVD+RW, and DVD-ROM discs.

As noted, the Examiner has proposed that to accomplish this different objective, the system of Ogihara would not need to compare the LV1 and LV2 detection levels against each other, but could only compare one to a predetermined reference value.

The Examiner has further acknowledged that it would be essential for the system of Ogihara to compare the LV1 and LV2 detection levels against each other, if discrimination between all three DVD-RW, DVD+RW, and DVD-ROM discs were desired.

However, the remarks on pages 7-9 of the Examiner's Answer set forth that the Examiner's proposed modification is not to change the system of Ogihara to still discriminate between all three disc types, but only two types; and accordingly then the "essential" characteristic of comparing the LV1 and LV2 detection levels would no longer be applicable.

Contrary to this assertion, applicants again submit that this is an improper rationale for changing Ogihara from its desired focus and purpose.

The fact that Ogihara could be modified as suggested by the Examiner is irrelevant as to whether one skilled in the art would find the same change obvious based upon the essential requirements of Ogihara to permit Ogihara to still accomplish the stated goals of Ogihara.

Page 8 of the Examiner's Answer states several reasons why a manufacturer would not desire to differentiate between all three disc types.

However, again, it is respectfully submitted that the Examiner's reasons for changing Ogihara do not take into consideration the actual teaching of Ogihara, i.e., the Examiner has only broadly interpreted a purpose of Ogihara as discriminating between a read-only disc and a

write-capable disc, and based all further modifications upon suggested modification of Ogihara that would still accomplish this goal, though without the need to discriminate between the particular three disc types.

This is an incomplete understanding of the teaching of Ogihara.

As noted above, the purpose and invention of Ogihara is not merely the broadly discriminating between read-only and write-capable disc types, but a system and methodology that can accomplish this goal.

Any proposed modification of Ogihara must take into consideration the inventive and desired inventive methodologies for accomplishing the stated goal of Ogihara.

More particularly, as noted above, both the Field of Invention and the Summary of Invention of Ogihara state that the invention is based upon the extraction of plural frequencies for groove wobbles, and based on those extracted plural frequencies it can be determined whether the disc is a write-capable disc. As stated in the Field of Invention, "Specifically, the present invention relates to an optical disk drive and the like in which plural frequency components corresponding to the frequencies of the groove wobbles of plural kinds of recording-capable optical disks are respectively extracted from the signals corresponding to the groove wobbles reproduced from the mounted optical disks, and based on the extracted plural frequency components, it is identified whether or not the mounted disks are recording-capable optical disks, thereby identifying accurately in a short time whether or not the mounted optical disks are recording-capable optical disks."

Thus, the inventive methodology proposed by Ogihara is the extraction of plural frequency components regarding an observed groove wobble, and based upon those plural frequency components it can be determined whether the disc is a write-capable disc.

This recited "essential" aspect and methodology is the inventive feature of Ogihara and is the same inventive feature that is used to accomplish the stated disc discriminating objective of Ogihara.

Thus, any proposed modification of Ogihara must take into consideration this essential feature of Ogihara. Here, as noted in the Appeal Brief, any modification of Ogihara to not have this essential feature would not be obvious.

The Examiner has discounted this inventive feature of Ogihara, and only more broadly reasoned that any modification of Ogihara would be reasonable as long as Ogihara would still discriminate between the read-only and write-capable disc types.

However, this interpreted broad objective of Ogihara must still take into consideration

how Ogihara actually accomplishes this goal. Otherwise, the "essential elements" aspect of MPEP §§ 2144(II) and 2143.01 (V and VI), and corresponding case law, particularly pointing out that it is not an obvious operation to modify a reference away from "essential elements," would have no weight or meaning.

Based upon the Examiner's proposed modification of Ogihara, any modification of any reference would be obvious as long as their broadest goals were still accomplished, without considering the actual "essential elements" of the invention described in that reference for accomplishing the state goal.

Rather, the lack of considering the essential elements of a reference for accomplishing the stated goals of that reference would render improper a proposed obviousness rational to accomplish the goal through a different process without those essential elements.

Here, contrary to the Examiner's proposed changing of the operation of Ogihara, to only discriminate between two types of discs, the system of Ogihara may still accomplish this more limited goal by still using the two LV1 and LV2 discrimination limits aspect of Ogihara, i.e., the system of Ogihara does not need to be substantively changed to accomplish the Examiner's proposed goal of discerning between only two disc types. The system would still perform the inventive essential elements of Ogihara, but would only output a result based upon the Examiner's indicated desired two disc types.

Therefore, as stated herein, to suggest to modify Ogihara to accomplish the stated goal of discriminating between disk types without considering the "essential elements" of Ogihara to accomplish those goals is improper. In addition, it would not have been obvious to change Ogihara to not perform the essential elements to accomplish a same goal through a different element.

Again, as noted above, Ogihara is focused on accomplishing a stated goal of discriminating between a read-only disc and a write-capable disc, and further sets forth an invention to accomplish that goal. The invention of Ogihara requires there to be plural frequency components extracted and a disc discrimination be determined based upon those extracted plural frequency components.

This requires any system of Ogihara, modified or not, to extract at least two frequency components, such as the particularly described LV1 output amplitude from a first band pass filter and the particularly described LV2 output amplitude from the second band pass filter. These at least two frequency components are then used to discriminate the disc type. Any modification of Ogihara to extract only one frequency component would teach away from the essential requirements of Ogihara.

Thus, contrary to the remarks presented by the Examiner's Answer, it is respectfully submitted that it would not have been obvious to modify Ogihara as suggested by the Examiner against the actual teachings of Ogihara.

Section (c) of Examiner's Answer

Page 9 of the Examiner's Answer sets forth a response to applicants remarks that:

Further, based on FIGS. 4A-C of Ogihara, for example, one skilled in the art would understand that if the Examiner's proposed modification of Ogihara were implemented, the system would not work or would have an impermissible error rate

Thus, if a user were to insert a DVD-RW disc, when only the DVD+RW and DVD-ROM discs were detected for, the system would incorrectly identify the disc as a DVD-ROM disc. If the user were to insert a DVD+RW disc, when only the DVD-RW and DVD-ROM discs were detected for, then again the system would incorrectly identify the disc as a DVD-ROM disc.

Accordingly, the detection of both of DVD-RW and DVD+RW, are necessary when detecting for whether the input disc is a DVD-ROM.

Therefore, one skilled in the art would not modify Ogihara as suggested by the Examiner, both as the technique of using the LV1 and LV2 detection levels is essential to Ogihara and because the Examiner's proposed modification of Ogihara would make the system less reliable, and potentially not work. The Examiner's proposed modification of Ogihara would render the invention of Ogihara inoperable or undesirable for its intended purposes.

The Examiner merely states on page 9 that it would have been obvious that one skilled in the art would have performed experimentation and designing of the eventual system to have adequate error rate.

In particular, the Examiner appears to identify multiple elements of Ogihara that would need to be substantively redesigned and/or reprogrammed to accomplish the proffered modified system of Ogihara.

Here, applicants respectfully submit that the Examiner's remarks only reemphasize the non-obviousness of modifying Ogihara as suggested by the Examiner.

To meet a prima facie obviousness case, there must be a reasonable chance of success for the proffered modification. Briefly, further, to meet a prima facie anticipatory rejection there must be an enabled disclosure to rely upon the same as anticipating any claimed feature. Thus, for any proposed modification of Ogihara to ultimately read on the all the claimed features of the rejected claims there would necessarily be required an enabling combination, i.e., the proffered combination should not need any extensive or unnecessary experimentation or designing to produce a resultant system that would accomplish the stated goals in the stated way.

However, as noted in applicants Appeal Brief, it was submitted that it would not have been obvious to modify Ogihara as suggested by the Examiner, as the suggested modification would render the invention of Ogihara inoperable or undesirable for its intended purpose.

The Examiner's Answer's repeated identified necessary modifications and redesigning necessary to accomplish the proposed modification only reemphasizes both that substantial changes would be necessary to Ogihara and that such changes would require undue experimentation.

Conversely, as noted above, the Examiner's proposed desired goal of discriminating between only two disc types, e.g., only a DVD-RW and DVD-ROM or DVD+RW and DVD-ROM, could easily be accomplished through the existing system of Ogihara, without extensive modification or redesigning. This different goal could easily be accomplished by performing the same plural frequency component extraction but by identifying only one of the disc DVD-RW or DVD+RW types based upon the comparison of the plural frequency components.

Thus, contrary to the Examiner's proposed modification of Ogihara both against the essential elements teaching of Ogihara and the requiring of extended redesigning of the components of Ogihara, Ogihara would more likely be modified to still perform the essential elements of extracting the plural frequency components while outputting less disc differentiation information.

Accordingly, it is again respectfully submitted that the Examiner's proposed modification of Ogihara would not have been obvious.

3-4. Rejection of claims 6-7, 31-32, 39-40, and 42-43 under 35 U.S.C. §103(a)
Section (f) of Examiner's Answer

In response to applicant's Appeal Brief, stating that any relied upon "reference value" in the Examiner's proposed modification of Ogihara would not have been 16nm, the Examiner's Answer merely states that the claimed "about 16nm" is close enough to a "18nm-30nm" range for DVD+RW disc to act as a discriminating level for discriminating between a DVD-ROM and DVD-RW disc, and thus the "reference value" that would be used by the modified Ogihara could be about 16nm, e.g., 18nm which is close to 16nm.

However, applicant's remarks were stated as pointing out that they system of Ogihara would have a particular determination level, such as 180 mVpp or 30 mVpp, i.e., the "reference value" would be a voltage value.

Conversely, the claimed reference value is about a particular width, i.e., a width of a

detected wobble on the surface of the disc, and claimed in claim 6 as being about 16nm.

Thus, based on the RF pickup and amplifier stages the differing available mVpp levels of Ogihara may result from some width of some wobble on a reviewed disc, the mVpp levels as a reference value is not the same as a reference value of the width of the wobble, i.e., the mVpp levels of Ogihara are not the same as the claimed width values in nm.

Further, the Examiner has indicated that the proposed modification of Ogihara to use "16nm" as a reference value would permit the system to differentiate between a DVD+RW disc and a DVD-ROM disc by deciding the disc was a DVD-ROM when the detected value was less than 16nm or 18nm.

However, this proposed modification is not appropriate.

The Examiner has proposed to modify Ogihara to set forth a system that incorrectly identifies the disk type.

Based upon the Examiner's proposed modification of Ogihara to rely upon a 16nm reference value, the system would at all times be inoperative for any DVD-ROM disc determinations, and more particularly would at all times improperly identify the underlying disc as being a non-write-capable disc when the disc was actually a write-capable disc.

Lastly, it is further respectfully submitted that in this field, the claimed about 16nm cannot be reasonably interpreted to be 18nm or 14nm, and equally cannot be interpreted as being any value between 0 and 18nm, for example..

As explained in the Background of the present application, a 16nm wobble width would fall equally between DVD-RW (7-14nm) and DVD+RW (18-30nm) ranges, thus, the different wobble widths have particular significance, such that a wobble width of 14nm would represent a different disc type from a wobble width of 18nm. Accordingly, the claimed "about 16nm" cannot be reasonably equated to any range of widths of between 1 and 18nm; there are significant differences between the type of disc with only small changes in wobble widths.

Thus, to interpret 16nm as being equated 1-18nm would be unreasonable. The claimed "about" 16nm must be given patentable weight based the particularly described ranges presented in the present application.

Accordingly, in addition to the modified Ogihara not using the same reference values, it would not have been obvious to modify Ogihara as suggested as the system would be inoperative for its intended purpose.

5. Rejection of claims 8, 33, 41, and 44 under 35 U.S.C. §103(a)

Section (g) of Examiner's Answer

In addition to the above remarks regarding the Examiner's Answer (f), it is equally noted that the Examiner's proposal of modifying Ogihara to determine a width of less than 14nm as being a DVD-ROM and any width greater than 14nm as being a DVD-RW would result in a system that would at all times incorrectly identify DVD-RW discs, as well as DVD-ROM discs.

The Background of the present application clearly points out that the width of a wobble for a DVD-RW would be in the 7-14nm range. Thus, interpreting a wobble width greater than 14 nm as representing a DVD-RW disc would result in the incorrect disc type being determined. Similarly, by interpreting a wobble width less than 14nm as being the DVD-ROM disc type, would equally incorrectly identify the disc as a DVD-ROM disc type when the disc could actually be a DVD-RW disc type.

Thus, the Examiner's proposed modification of Ogihara would result in a system that at most times would incorrectly identify the underlying disc type. Therefore, such a modification would not be obvious.

IV. CONCLUSION

Appellant submits that the Office fails to establish that claims 1-4, 6-8, 15, 17-18, 27, 29-33 and 39-44, are obvious under 35 USC §103(a) over the cited documents. Thus, reversal of the Examiner's rejections is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees required in connection with the filing of this Appeal Brief to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 7/13/10

By: 

Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501